Monitoring Data Record

Project Title: U-4026B (Davis Drive) COE Action ID: 200120448
Stream Name: Tributary to Burdens Creek (Site 9) DWQ Number: 051972
City, County and other Location Information: Durham County, Davis Drive (Sta. 284+50RT.)
Date Construction Completed: 12/5/07 Monitoring Year: (3) of 5
Ecoregion: 8 digit HUC unit 03030002
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 261' Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 1/15/10
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd, Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status:

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level **1**

Permit States: The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action);visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 6 photos were taken from 3 photo point locations looking up and down stream

Dates reference photos have been taken at this site: 2/19/08, 6/11/08, 1/28/09, 7/6/09, 1/15/10

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference: A site map is included with this report showing the photo point locations.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Planted vegetation noted along the streambank consisted of black willow, silky dogwood, and elderberry live stakes. Tulip poplar, sycamore, willow oak, green ash, red oak, and river birch bareroot seedlings were noted in the floodplain. Other vegetation noted consisted of Juncus sp., fennel, goldenrod, black eyed susan, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The Tributary to Burdens Creek is stable for Year 3 Winter evaluation, except for two slight headcuts that have formed at Stations 284+50 (Photo Point #1 Downstream) and at Station 285+50. The headcuts have not changed since the summer evaluation and these areas remain stable. NCDOT personnel met onsite on 5/11/09 to discuss possible options for corrective action. It was decided at that time that corrective action was not necessary and NCDOT would continue to monitor the stream relocation. A bankfull event was noted during this monitoring cycle.

Date Inspected 1/15/10	Station Number Sta. 284+50 Photo Point #1 (Downstream)	Station Number Sta. 285+50 Additional photo	Station Number	Station Number	Station Number
Structure Type		Crossvane			
Is water piping through or around structure?		Water is flowing under crossvane			
Head cut or down cut present?	Slight Headcut	Slight Headcut			
Bank or scour erosion present?					
Other problems noted?					

Tributary to Burdens Creek

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Year 3 Winter – January 2010

Tributary to Burdens Creek

Water is flowing under a crossvane and a slight headcut has formed at Sta. 285+50 which is downstream of Photo Point #3

MATCHLINE– STA. 286+00.00
Tributary to Burdens Creek
U-4026B
Durham County
Photo Point Locations
PP#1
PP#2
PP#3
PROP. 2'-6" C&G
PROP. 1'-6" C&G
+35 -L-
95'
+25 -L-
190'
60"CONC
38'
26'
8.75'
+66.25
352
351
350
355